CLAIM OR CLAIMS

WHAT IS CLAIMED IS:

1. A method of automatically setting gain and offset for the measurement
and display of a signal comprising the steps of:

acquiring the signal;

defining a region of interest within the acquired signal;

determining max and min values for the acquired signal within the

region of interest;

testing the max and min values for clipping on a display;

calculating from the max and min values a gain and offset for the

signal when either the max or min value clips in the testing step; and

applying the gain and offset to the signal in the acquiring step.

2. The method as recited in claim 1 further comprising the step of reiterating

the determining, testing; calculating and applying steps using the gain and

offset from an immediately prior calculating step until a criterion is satisfied.

3. The method as recited in claim 2 wherein the criterion comprises neither

max and min value clips in the testing step.

4. The method as recited in claim 2 wherein the criterion comprises a

number of iterations equaling a specified maximum.

5. The method as recited in claim 2 wherein when only one of the max and min values clips in the testing step only offset is calculated in the calculating step in subsequent iterations until either both max and min values clip or neither clip.

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